

REMARKS / ARGUMENTS

Claims 1-20 are currently pending in the application. No claims are allowed. Claims 1, 4, 6-8, 10 and 12-20 are rejected and claims 2, 3, 5, 9 and 11 are objected to. Claims 1, 6-8, 12, 13, 17 and 20 are cancelled without prejudice by this response. Claims 2, 4, 14 and 19 have been amended. Claim 21 is added by this response with support from the specification and therefore contains no new matter.

In the Office Action, the drawings were objected to under 37 CFR § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for deploying said detecting means (claims 6 and 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

It has been stated in the Office Action that proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

It is further stated in the Office Action that the specification is objected to as to failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR § 1.75(d) (1) and MPEP § 608.01(o). Correction of the following is required: The means for deploying the detecting means (claims 6

and 7) is unsupported in the written specification, as originally filed.

In the Office Action, claims 6-7, 12-13, and 19 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

According to the Office Action, for claims 6 and 7, it is not understood as to what structure is intended to correspond to the claimed function of "means for deploying said detecting means"? In claim 19, it is not understood as to how one may perform the step of sinking the hydrodynamic module to the bottom of the body of water when in the previous step (see claim 18) the hydrodynamic module has been recovered from the body of water.

In the Office Action, claims 1, 4, 6, 14 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Myers (reference A: U.S. Patent No. 1,295,355).

As stated in the Office Action, Myers discloses a device for countering an underwater target comprising:

- a) a module; 1
- b) at least one propulsor; 12, 13
- c) a gun; and 88 or [7, 9, 98]
- d) detecting the underwater target. 107 or 35

In the Office Action, claims 8, 10, 12 and 15-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Myers (U.S. Patent No. 1,295,355) in view of Kirschner et al. (reference B: U.S. Patent No. 5,911,568).

The Office Action states that Myers applies as previously recited. However, undisclosed is a source of clearing the gun barrel via compressed air. Kirschner et al. teach a source of clearing the gun barrel via compressed air, 104, 106, 108. Applicant is selecting and assembling a mean known in this art to clear an underwater gun barrel prior to firing and putting it to use as it is already commonly known to be used in this art. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teachings of Kirschner et al. to the Myers device and have an underwater gun barrel that is cleared by compressed air.

In the Office Action, claims 1 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Adams (reference C: U.S. Patent No. 6,058,847).

Adams discloses a device for countering an underwater target comprising:

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|--------------------------------|-----|
| a) a module | 2,3 |
| b) at least one propulsor; and | 4,5 |
| c) a gun | 8 |

In the Office Action, claims 1, 4, 6, 14 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hillenbrand (reference D: U.S. Patent No. 5,786,545).

Hillenbrand discloses a device for countering an underwater target comprising:

- a) a module; 12
- b) at least one propulsor; 30
- c) a gun; and figs. 5, 6, 7
- d) detecting the underwater target. 25 or 51

In the Office Action, claims 2-3, 5, 9 and 11 were objected to as being dependent upon a rejected claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In the Office Action, it was stated that claims 7 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in the Office action and to include all of the limitations of the base claim and any intervening claims.

According to the Office Action, claim 19 is too indefinite in its current form to make a determination regarding patentable subject matter.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Korolenko,

Wheaton, Drimmer, Burt and Lawrence disclose other states of the art underwater devices.

These rejections and objections are respectfully traversed in view of these amendments and remarks.

In the Office Action, the drawings and the specification were objected to as not showing the features of the invention in support of claims 6 and 7. In response, claims 6 and 7 have been cancelled without prejudice or disclaimer and therefore the objections of the Office Action are resolved.

In the Office Action, claims 6, 7, 12, 13 and 19 of the present application were rejected under 35 USC 112, second paragraph as being indefinite. In response, claims 6, 7, 12 and 13 have been cancelled without prejudice or disclaimer and therefore the rejections for these claims are resolved.

In regard to claim 19, the claim has been amended to be dependant on claim 16 such that any dependency on a claim supporting recovery from a body of water is removed. As a result, the rejection under 35 USC 112 is resolved for amended claim 19 of the present application.

In the Office Action, claims 1, 4, 6, 14 and 20 of the present application were rejected under 35 USC 102(b) as being anticipated by Myers (U.S. Patent No. 1,295,355). In response, claims 1, 6 and 20 have been cancelled without prejudice or

disclaimer and therefore the rejections for these claims are resolved.

In regard to claims 4 and 14, the claims have been amended to identify the means or method of detection as acoustic. Acoustic detection clearly distinguishes the claims from the visual detection fixture of the Myers reference (See FIGS. 9 and 10). Since, the cited reference neither teaches nor suggests the use of acoustic detection, the amended claims are not anticipated by the Myers reference and the rejection of the Office Action is resolved.

In the Office Action, claims 8, 10, 12 and 15-18 of the present application were rejected under 35 USC 103(a) as being unpatentable over Myers (U.S. Patent No. 1,295,355) in view of Kirschner et al. (U.S. Patent No. 5,911,568). In response, claims 8, 12 and 17 have been cancelled without prejudice or disclaimer and therefore the rejections for these claims are resolved.

In regard to claim 4, upon which claim 10 depends, the claim has been amended to recite a means for acoustically detecting the underwater target. Acoustic detection clearly distinguishes the claim from the visual detection fixture of the Myers reference (See FIGS. 9 and 10). Since, the cited reference neither teaches nor suggests the use of acoustic detection, it would not be obvious to one skilled in the art to

combine the cited references to produce the device of amended claim 4. As such, claim 10, which depends on amended claim 4, also would not be obvious to one skilled in the art and unpatentability rejection of the Office Action is resolved.

In regard to claims 15, 16 and 18, claim 14 upon which the claims depend has been amended to recite that the underwater target is acoustically detected. Acoustic detection clearly distinguishes the claim from the visual detection fixture of the Myers reference (See FIGS. 9 and 10). Since, the cited reference neither teaches nor suggests the use of acoustic detection, it would not be obvious to one skilled in the art to combine the cited references to produce the device of amended claim 14. As such, claims 15, 16 and 18, which depend on amended claim 14, also would not be obvious to one skilled in the art and unpatentability rejection of the Office Action is resolved.

In the Office Action, claims 1 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Adams (U.S. Patent No. 6,058,847). In response, claims 1 and 20 have been cancelled without prejudice or disclaimer and therefore the rejections for these claims are resolved.

In the Office Action, claims 1, 4, 6, 14 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hillenbrand (U.S. Patent No. 5,786,545). In response, claims 1,

6 and 20 have been cancelled without prejudice or disclaimer and therefore the rejections for these claims are resolved.

In regard to claims 4 and 14, the claims have been amended to identify the device as comprising an autonomous module or a method providing an autonomous module for countering an underwater target. Use of an autonomous module for acoustic detection of and countering an underwater target distinguishes the claims from the tethered vehicle 12 of the Hillenbrand reference (Also see FIG. 1). Since, the cited reference neither teaches nor suggests the use of an autonomous module for acoustic detection of and countering an underwater target, the amended claims are not anticipated by the Hillenbrand reference and the rejection of the Office Action is resolved.

In the Office Action, claims 2, 3, 5, 9 and 11 were rejected to as being dependant upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, claim 2 has been amended to include all the limitations of base claim 1. Claims 3, 5, 9 and 11 which are dependant on claim 2 are submitted for consideration in view of amended claim 2. As such, the objections of the Office Action are resolved for claims 2, 3, 5, 9 and 11.

In the Office Action, claims 7 and 13 would be allowable if rewritten to overcome the rejections of 35 USC 112, second

paragraph. In response, claims 7 and 13 have been cancelled without prejudice or disclaimer and therefore the rejections of 35 USC 112, second paragraph are otherwise resolved.

In the Office Action, it was stated that claim 19 is too indefinite in its current form to make a determination. In response, the claim has been amended to be dependant on claim 16 such that any dependency on a claim supporting recovery from a body of water is removed. As a result, the determination of the patentability of the claim may be accomplished.


Applicants respectfully request reconsideration and allowance of the claims above for the identified application.

The Examiner is invited to telephone Michael P. Stanley, Attorney for Applicants, at 401-832-6393 if, in the opinion of the Examiner, such a telephone call would serve to expedite the prosecution of the subject patent application.

Respectfully submitted,

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